

CLAIMS

What is claimed is:

1. A resonance generation device of an electronic musical instrument, having a digital signal processing unit artificially creating a resonance, comprising:

a key depression state detecting means detecting whether a key which is in a specific relation with a played key is already depressed or not when a key playing operation is performed;

a specific relation detecting means detecting the relation between the played key and the depressed key when said key depression state detecting means detects that the key in the specific relation with the played key is already depressed; and

a musical sound generation means sound generating a musical sound of the played key when said specific relation detecting means detects that the played key and the depressed key are in the specific relation which is set in advance, and generating a predetermined musical sound based on the relation between the played key and the depressed key from a position of the depressed key.

2. The resonance generation device of the electronic musical instrument according to claim 1,

wherein said musical sound generation means generates a monaural resonance, makes the position of the depressed key to be a sound generation source by

sound generating the generated monaural resonance from left-and-right speakers with a volume in accordance with the key depressed position to make a sound generation position panning.

3. The resonance generation device of the electronic musical instrument according to claim 2,

wherein said musical sound generation means controls the volume of the resonance based on the relation between the key played position and the key depressed position.

4. A resonance generation method of an electronic musical instrument, having a digital signal processing unit artificially creating a resonance, comprising:

a key depression state detecting process detecting whether a key which is in a predetermined relation with a played key is already depressed or not when a key playing operation is performed;

a specific relation detecting process detecting the relation between the played key and the depressed key when said key depression state detecting process detects that the key in the predetermined relation with the played key is already depressed; and

a musical sound generation process sound generating a musical sound of the played key when said specific relation detecting process detects that the played key and the depressed key are in the specific relation which is set in advance, and generating a predetermined musical sound based on the

relation between the played key and the depressed key so that a position of the depressed key is to be a sound generation source.

5. The resonance generation method of the electronic musical instrument according to claim 4, wherein said musical sound generation process generates a monaural resonance, makes the position of the depressed key to be a sound generation source by sound generating the generated monaural resonance from left-and-right speakers with a volume in accordance with the key depressed position to make a sound generation position panning.

6. The resonance generation method of the electronic musical instrument according to claim 5, wherein said musical sound generation process controls the volume of the resonance based on the relation between the key played position and the key depressed position.

7. A computer program product for executing a resonance generation method of an electronic musical instrument having a digital signal processing unit artificially creating a resonance in a computer, comprising:

program code means for detecting a key depression state, detecting whether a key which is in a predetermined relation with a played key is already depressed or not when a key playing operation is performed;

program code means for detecting a specific

relation, detecting the relation between the played key and the depressed key when said program code means for detecting the key depression state detect that the key which is in the predetermined relation with the played key is already depressed; and

program code means for generating a musical sound, sound generating a musical sound of the played key when said program code means for detecting the specific relation detect that the played key and the depressed key are in the specific relation set in advance, and generating a predetermined musical sound based on the relation between the played key and the depressed key so that a position of the depressed key is to be a sound generation source.

8. A computer readable recording medium recording a computer program for executing a resonance generation method of an electronic musical instrument having a digital signal processing unit artificially creating a resonance in a computer, comprising:

program code means for detecting a key depression state, detecting whether a key which is in a predetermined relation with a played key is already depressed or not when a key playing operation is performed;

program code means for detecting a specific relation, detecting the relation between the played key and the depressed key when said program code means for detecting the key depression state detect that the key in the predetermined relation with the

played key is already depressed; and

program code means for generating a musical sound, sound generating a musical sound of the played key when said program code means for detecting the specific relation detect that the played key and the depressed key are in the specific relation set in advance, and generating a predetermined musical sound based on the relation between the played key and the depressed key so that a position of the depressed key is to be a sound generation source.